

PT 1075 RUC36 DESCRIPTIVE SUMMARY

Program Element # 1.4.21F Title Defense Support Program

Category Strategic Forces Budget Activity # 4 - Military Acquisition and Related Equipment

BACKGROUND AND DESCRIPTION: The Defense Support Program (DSP)

and related developments. The DSP satellite system provides

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to our national command authorities and other designated users. The system also serves these more specific purposes:

Two ground stations, one overseas and one within the CONUS receive, process and transmit satellite mission data. The Joint Chiefs of Staff have designated the following organizations as users of DSP data: Continental Air Defense Command (CONAD), Aerospace Defense Command (ADC), Strategic Air Command (SAC), National Military Command Center (NMCC), Atlantic Command (ANTCON), Pacific Command (PACOM), European Command (EUCOM),

Planned system improvements are intended to prolong the useful life of each satellite, make the satellite more survivable, increase the probability data will be available

RELATED ACTIVITIES:

Defense Satellite Communications System, Phase II (DSCS-II, 33110F) will provide an alternative communications route. Advanced Airborne Command Post (AABNCP, 64723F) is a potential user of this program's data. DSP is a key element of the Worldwide Military Command and Control System (WWMCCS) and is related to the other elements of the WWMCCS.

Current Activity: The TITAN IIC is currently being launched and operated.

Program Element # 1.0.1.1

Title: Defense Support Program

WORK PERFORMED BY: CONRAD has been designated to maintain operational control of the DSP system. Operation and technical management are the responsibility of the USAF Aerospace Defense Command (ADC). The Air Force Logistic Command (AFLC) provides logistic support. The Space and Missile Systems Organization (SMSO) of the Air Force Systems Command (AFSC), Los Angeles, CA, has the overall development and procurement management responsibility for the DSP. TRW, Redondo Beach, CA, is the prime contractor for the spacecraft and satellite integration. Aerojet ElectroSystems Company, Azusa, CA, is the prime contractor for the launcher. Western Development Laboratories/Philco Ford, Palo Alto, CA, is the prime contractor for the User Display Segment and the Data Acquisition and Communications Segment. Aerojet ElectroSystems and IBM, Westlake, CA, are responsible for the system's software development. System Development Corporation, Santa Monica, CA, is responsible for software configuration management and integration. The Martin Company, Denver, CO, is responsible for the TITAN IIC booster and Eastern Test Range (ETR) launch support. The Atomic Energy Commission (Sandia Corporation) is responsible for

The Aerospace Corporation, Inglewood, CA, provides General Systems Engineering/Technical Direction support to the DSP System Program Office.

PROGRAM ACCOMPLISHMENTS AND FUTURE PROGRAMS:

1. FY 1973 and Prior Accomplishments: The program has provided for procurement of 12 satellites and TITAN IIC boosters, construction of two data processing facilities (overseas and CONUS), user display equipment, software, communications equipment, and a training facility. The training facility is also used for software development and mission data analysis. —

— Future launches will be conducted to replenish.

Project Activity #4 - Building, Integration and Related Equipment

Program Element # 1.4.1.1 1.4.1.1.1 1.4.1.1.1.1

satellites currently deployed when operationally required. An HEC-46 communications terminal has been installed at the Overseas Ground Station (OGS) which will enable DSP data to be transmitted to the COMSEC via Defense Satellite Communications System Phase II (DSCS-II) communications satellites, thus providing an alternate communications mode.

2. FY 1974 Program: Expenditures will support completion of modifications necessary

to prepare the satellite for possible universal (i.e., any orbit) deployment. Funding is provided to modify the satellite to enable it

to increase the satellite's output power, thereby enabling DSP data to be received by smaller, less costly antennae; to increase the satellite's on-orbit reliability;

Further, funding is provided to analyze and evaluate collected satellite data;

to continue support of DSP Augmentation; to provide automatic circuit card test equipment; to procure satellite tracking set (STS) training equipment; to provide support for software development; to complete ground station shielding tests and make necessary shielding repairs; to begin fabrication of an initial small processing station (SPS); and to procure an IBM 360/75 computer used in software development and modification.

3. FY 1975 Planned Program: The planned FY 75 program includes expenditures for initial development of an operational modification

to continue to analyze and evaluate collected satellite data,

and to provide continued support of DSP Augmentation. Additional funding is provided to begin development of software to be used with small processing stations, and to continue fabrication of a small processing station started during FY 74.

4. Program to Completion: RDT&E funding will support continued evolutionary development of the satellite system in support of DSP requirements. Primary emphasis will be directed toward eliminating or minimizing deficiencies discovered during operational employment.

Budget Activity #4 - Military Astronautics and Related Equipment

Program Element # 1.9.01E

Title: Defense Support Program

C. Milestones:

Estimated Cumulative RDT&E
Cost to Reach Milestones:
(\$ in Millions)

	Date	
a.		\$366.2
b.		375.8
c.		382.1
d.		392.0
e.		
f.		397.2
g.		405.8
h.		445.0
i.		456.2
		461.8

RESOURCES: (\$ in Millions)

	FY 73 and Prior	FY 1974	FY 1975	FY 76-79	Total** Estimated Cost
RDT&E: Funds	400.3	62.1	33.8	33.8	530.0
Quantities					
Satellites/boosters	4/1	0	0	0	4/1
Procurement:					
Funds (3020, 3080)*	616.0	28.1	81.7	477.8	1,203.6
Quantities					
Satellites/boosters	8/11	0/0	1/0	5/6	14/17

* Excludes spares funded in Other Procurement, Air Force.

** Through FY 79